Tackling drug-resistant infections globally

# The Global Impact of Antimicrobial Resistance

By William Hall





#### What is the Review on AMR?

- Assessing the economic cost of AMR
- **Recommending solutions to** governments
- Alongside others, building an international consensus for action



Jim O'Neill, Review Chair

#### **Current cost of AMR**

A lack of high quality global surveillance data means the exact impact of AMR is not as well understood as it should be.

However the information we do have from the US Centre for Disease Control, European Union, and others, paint a very worrying picture.

#### **Financial and Human Cost**

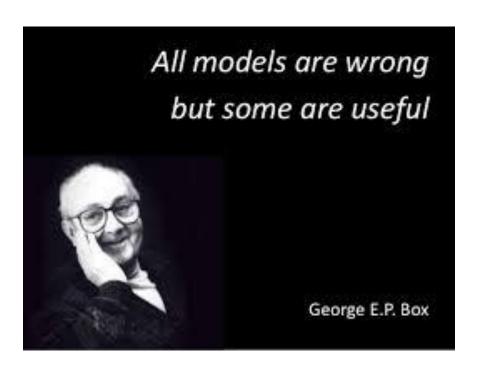
- 23,000 people die annually in the US already
- 700,000 people die worldwide
- Both of these are conservative estimates
- Estimated to cost the US health care system 20 billion USD a year



### Projected future cost

Our projected cost of AMR is based on research that we commissioned from RAND and KPMG

#### **Economic cost of resistance**



#### **KPMG**

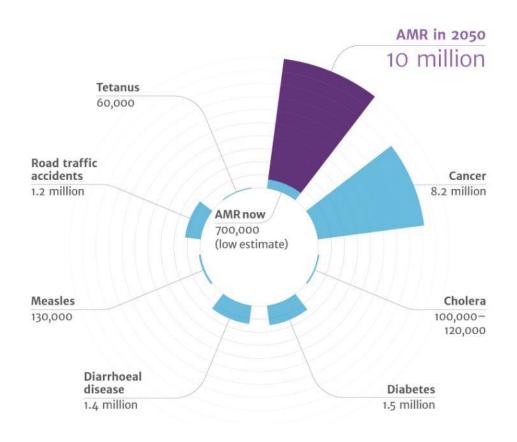
- Resistance rates will rise to 40%
- Hospital acquired infection rates to double

**RAND** 

 Resistance rates rise to 100% in 10 years



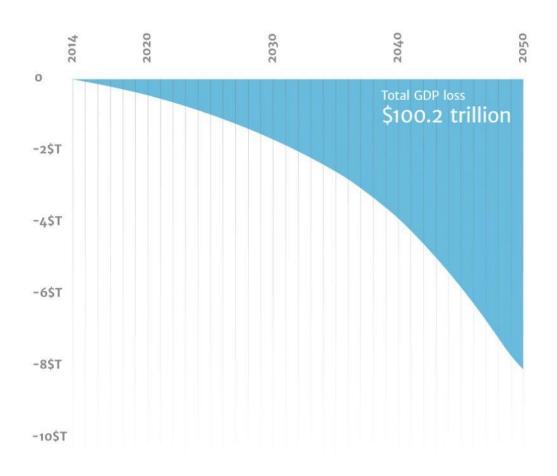
### How AMR compares to other causes of death





**The Review Cost of AMR now**  **Projected cost** 

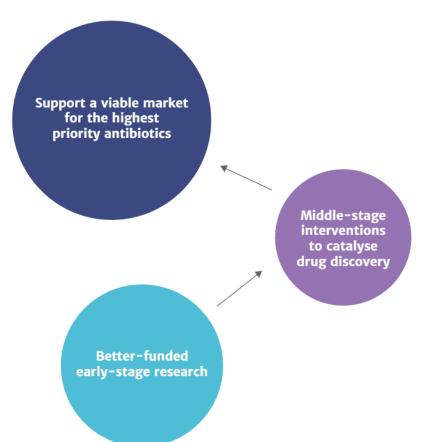
#### **Economic cost**





The Review Cost of AMR now Projected cost Solutions Next Steps

## Our solutions to find new antibiotics



- Fund early stage research
- Market entry rewards
- Harmonise regulation, facilitate public trials and reduce duplication



The Review

**Cost of AMR now** 

**Projected cost** 

Solutions

**Next Steps** 

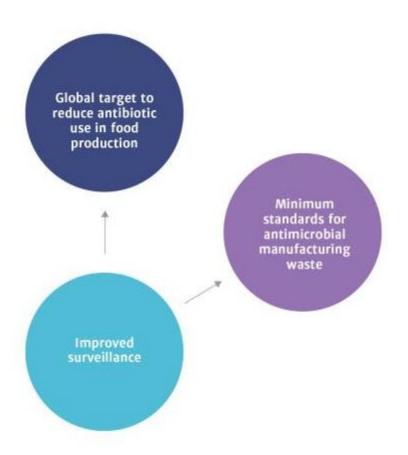
## **Developing New Diagnostics**

Diagnostics are more expensive than empirical prescribing





## **Agriculture and the Environment**



- Global target to reduce antibiotic use in food production
- Minimum standards to reduce the amount of active ingredients reaching the environment in production
- Improvement in global surveillance



**The Review** 

**Cost of AMR** 

lanning

**Solutions** 

Implementation

## **Next steps for Review**

1. Vaccines and alternatives - mid February



2. Health infrastructure - March



3. Final report – May

The Review



If you are interested to know more please see our reports at AMR-Review.org, where you will also be able to sign up to be on our mailing list

Or e-mail me on Will.Hall@amr-review.org